

Title (en)

Method for the recycling of polylactic acid plastics

Title (de)

Verfahren zur Aufarbeitung von Polymilchsäure-Kunststoffen

Title (fr)

Procédé de recyclage de résine d'acide polylactique

Publication

EP 2295218 B1 20121219 (DE)

Application

EP 10006166 A 20071113

Priority

- EP 07815182 A 20071113
- AT 18802006 A 20061113

Abstract (en)

[origin: WO2008058303A1] The invention relates to a method for the pretreatment, reprocessing or recycling of thermoplastic material, wherein the plastic material to be treated is heated in at least one receptacle or reactor while undergoing constant mixing or movement and/or comminution at a temperature below the melting temperature of the plastic material, and as a result is at the same time crystallized, dried and/or purified, wherein at least one rotatable comminuting or mixing tool, with working edges that act on the material with a comminuting and/or mixing effect, is used for the mixing and/or heating of the plastic material, the heating taking place in particular by applying mechanical energy.

IPC 8 full level

B29B 17/00 (2006.01)

CPC (source: EP KR US)

B29B 17/0412 (2013.01 - EP KR US); **B29B 2017/0424** (2013.01 - KR); **B29B 2017/048** (2013.01 - EP US);
B29K 2067/046 (2013.01 - EP KR US); **B29K 2995/006** (2013.01 - EP US); **Y02W 30/62** (2015.05 - EP US)

Cited by

DE102013210110A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2008058303 A1 20080522; AT 505462 A1 20090115; AT 505462 B1 20101015; AT E552958 T1 20120415; AU 2007321746 A1 20080522;
AU 2007321746 B2 20110818; AU 2010257435 A1 20110120; AU 2010257435 B2 20110825; BR PI0718616 A2 20140225;
BR PI0718616 B1 20180123; CA 2668902 A1 20080522; CA 2668902 C 20160202; CA 2910701 A1 20080522; CN 101535018 A 20090916;
CN 101535018 B 20130501; CN 102357943 A 20120222; CN 102357943 B 20140924; DK 2101974 T3 20120723; DK 2295218 T3 20130402;
EP 2101974 A1 20090923; EP 2101974 B1 20120411; EP 2295218 A1 20110316; EP 2295218 B1 20121219; ES 2385105 T3 20120718;
ES 2399404 T3 20130401; JP 2010509413 A 20100325; JP 2012066588 A 20120405; JP 5302203 B2 20131002; JP 5366275 B2 20131211;
KR 101345633 B1 20131231; KR 101468448 B1 20141203; KR 20090092806 A 20090901; KR 20110007259 A 20110121;
MX 2009004892 A 20090521; PL 2101974 T3 20120928; PL 2295218 T3 20130531; PT 2101974 E 20120709; PT 2295218 E 20130327;
RU 2009122359 A 20101220; RU 2010150609 A 20120620; RU 2412804 C1 20110227; RU 2551496 C2 20150527; SI 2101974 T1 20120831;
SI 2295218 T1 20130329; UA 94973 C2 20110625; US 2010216902 A1 20100826; ZA 200903023 B 20100224

DOCDB simple family (application)

AT 2007000515 W 20071113; AT 07815182 T 20071113; AT 18802006 A 20061113; AU 2007321746 A 20071113;
AU 2010257435 A 20101224; BR PI0718616 A 20071113; CA 2668902 A 20071113; CA 2910701 A 20071113; CN 200780042085 A 20071113;
CN 201110350376 A 20071113; DK 07815182 T 20071113; DK 10006166 T 20071113; EP 07815182 A 20071113; EP 10006166 A 20071113;
ES 07815182 T 20071113; ES 10006166 T 20071113; JP 2009535521 A 20071113; JP 2011235339 A 20111026; KR 20097012202 A 20071113;
KR 20107029894 A 20071113; MX 2009004892 A 20071113; PL 07815182 T 20071113; PL 10006166 T 20071113; PT 07815182 T 20071113;
PT 10006166 T 20071113; RU 2009122359 A 20071113; RU 2010150609 A 20071113; SI 200730952 T 20071113; SI 200731164 T 20071113;
UA A200906007 A 20071113; US 51407007 A 20071113; ZA 20090504